Though much has already been accomplished, much more needs to be done. We now have more than 40 board-certified physiatrists working in the country. After we successfully concluded the Indonesian program, we started anew by adopting another Asian country—China. We hope that this program, using realistic approaches appropriate to the state of development of the countries concerned, may be replicated in other developing countries of the world.

Rehabilitation in China

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SINCE THE EARLY 1980s, rehabilitation medicine has developed rapidly as a medical specialty in China. Western techniques of medical rehabilitation have had a strong influence on treating physically disabling diseases and injuries in Chinese rehabilitation centers. With the influence of the cultural and social background and the heritage of traditional Chinese medicine, the practice and technique of medical rehabilitation in China bear some unique characteristics.

Priorities of Rehabilitation Programs

Because cerebrovascular accident is common, with an incidence of 280 to 480 per 100,000 persons, stroke rehabilitation is the major program in most medical rehabilitation institutions in China. Rehabilitation for low back pain is almost equally popular. Rehabilitation programs for geriatric diseases are offered in many rehabilitative sanatoria, especially for mild coronary heart disease, emphysema, and degenerative arthritis. In recent years, orthopedic rehabilitation by surgical procedure and functional training for late sequelae of poliomyelitis have been conducted throughout China.

Integrative Approach With Chinese and Western Methods

The traditional Chinese methods are widely used in Chinese rehabilitation institutions, along with the Western methods. Depending on each case, traditional Chinese medicine is used alone or in combination with Western methods.

Traditional Chinese physiotherapeutic methods used in physical rehabilitation include acupuncture/moxibustion, Chinese manipulation and massage, Tai Chi and other traditional therapeutic exercises, and Chi Kung (Qigong), a kind of meditation and relaxation therapy. Traditional Chinese arts and crafts and Chinese calligraphy are used as occupational therapy. Herbal medicine plays an important role in both physical and mental rehabilitation. A wide variety of conditions respond well to traditional Chinese medicine, such as hemiplegia and other forms of paralysis, chronic pain, musculoskeletal disorders and arthritis, soft tissue injuries, and psychosomatic diseases.

Notable progress has been made in recent years in combining the traditional methods with modern technology. The development of physiotherapy on the acupressure point is an example. It integrates Chinese Jing-Luo theory with modern physical medicine. Common modalities are electropuncture, ultrasound-puncture, microwave-puncture, laser acupuncture, and ultraviolet irradiation on acupressure points. The advantage is a safer and more accurate control of dosage of stimulation with diversified stimulant agents.

Community-based Rehabilitation

In 1986 China started her project in pioneering community-based rehabilitation. This new approach to rehabilitation service soon spread to over six provinces and four major cities. Because the government is taking the initiative, community-based rehabilitation should keep growing both in the number of pilot sites and in the quality of the field work.

Because China is a vast country, with 80% of the population living in rural areas, institution-based rehabilitation cannot meet the needs of disabled persons. Community-based programs are the only solution to the problem of inaccessibility of rehabilitation services. These pilot projects follow the World Health Organization model as described in the manual, "Training Disabled People in the Community." There are, however, distinct features in the Chinese approach:

- Programs are sponsored, organized, and supervised by the government through the sectors of Public Health and of Civil Affairs and Welfare;
- Programs use the personnel network of primary health care in the community, supplemented by volunteer community workers;
- Psychiatric rehabilitation is usually covered in the program;
- Home-based functional training is supplemented by training in a community-based rehabilitation administration;
- Programs use simple and useful methods as well as Chinese traditional methods.

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Reprints not available.

Rehabilitation in Mexico

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AN INDEPENDENT living center for working age adults was established in Mexico in 1989. A retired rehabilitation advocate and administrator from California, Robert Wolfe, discovered three paraplegic men living in San Miguel de Allende, a colonial town in the state of Guanajuato, 160 miles north of Mexico City. Although the town had some excellent services for disabled children, there were none for adults. The three men knew of other physically challenged adults living in the town and others isolated in the nearby ranches. In the late 1970s Wolfe had a hand in securing start-up funding and establishing policies for California's 24 independent living centers. He had observed the Berkeley, California, self-help service delivery system and knew that it worked. These men decided to form a self-help group based on the Berkeley model. The new group in San Miguel was established as a nonprofit corporation and called itself "El Centro de Independencia."

El Centro now has grown to include 30 severely disabled

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Mexican adults and is adding a new member on the average of every two weeks. The Mexican model as established in San Miguel de Allende, a community of 90,000 persons, includes the traditional services of peer counseling, independent living skills training, advocacy, information and referral, and outreach, but in the absence of a rehabilitation hospital, vocational rehabilitation workshops, and other resources, El Centro set about filling other gaps in services. First, a liaison was created with the town's quality care hospital, Unión Medica, which is affiliated with the School of Medicine of the University of California, San Diego. Members of El Centro receive routine, specialized, and emergency care through this facility. Next, El Centro attracted the volunteer services of a retired occupational therapist from the United States and a physical therapist with extensive experience in medical facilities in Mexico City. A Mexican male nurse was hired on a full-time basis to provide service in the home, particularly to members who are paralyzed. A group exercise program was started. Hydrotherapy is available at a nearby hot springs resort. Group psychological services were begun with a volunteer Mexican psychologist.

Transportation—a new pickup truck—was obtained when the group received proceeds from the national lottery. The group also successfully advocated for lottery funds to construct workshops. With start-up help from the community, El Centro equipped a jewelry-making workshop, began a job placement service, formed a wheelchair basketball team, secured donated rental housing, and purchased wheelchairs and wheelchair parts. A program of social activities was established early in the formation of the program.

El Centro plans to start a wheelchair manufacturing and sales business. Other small businesses being planned are wearable art, ceramics, garment making, and bicycle repair.

El Centro is entirely composed of adult Mexicans who are challenged by severe disabilities. A support group, "Los Amigos," open to all interested persons, helps with fundraising and public relations.

El Centro is encouraging other groups of adult disabled Mexicans to replicate the San Miguel model.

Rehabilitation in Great Britain

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GREAT BRITAIN probably is unique in the developed world in that the specialty of rehabilitation medicine is just becoming recognised. In many respects this is an accident of history. When the various groups of spa doctors and others using physical methods of treatment came together between the First and Second World Wars, they designated themselves consultants in physical medicine. With the passage of time, it became clear that most patients they were treating were suffering from rheumatic diseases, and the specialty of rheumatology emerged. This contrasts with most other countries where rheumatology arose from internal medicine. Most rheumatologists, especially outside the main teaching centres, also ran the rehabilitation services. Other features that delayed the emergence of a rehabilitation specialty were the comparative rarity of spinal injury in Britain, strong family practice, amputation services being run by a government service entirely separate from the National Health Service, and the well developed, if underrated, professions of physiotherapy and occupational therapy.

One consequence has been that rheumatologic rehabilitation has become highly developed. A recent government survey has shown that not only do the rheumatic diseases form the largest group of disabling conditions in Britain, but they also represent the largest number of severely disabled people in the country at this time. There are only around 350 full-time rheumatologists in Britain—for a population of 56 million—but they are well spread throughout the country, uniformly trained and experienced, and tend to offer good rehabilitation for their patients.

A number of people are involved in the care of patients. A rheumatologist will establish the diagnosis, make an attempt at predicting outcome, and initiate drug, physical, and, if appropriate, surgical treatment. A physiotherapist will provide assessment of disability and the requirements for treatment, education of the patient, and certain physical modalities. Of these the most important is exercise, which has been shown to be of benefit in a range of conditions.

The occupational therapist's responsibilities include hand assessment, activities of daily living, wheelchair assessment, and home visiting. Help will be given with household and personal chores and with improving the workplace, often with the provision of technical equipment. Joint protection is an important educational topic. Splint-making may be done by a physiotherapist, occupational therapist, or an orthotist. A social worker provides advice on financial matters, assists with re-housing, and can provide a counseling service for family and other personal problems. Apart from making simple splints, orthotists have a special role in rheumatology in the provision of footwear. Painful feet are a major problem in diseases such as rheumatoid arthritis. Rheumatology nurses also have special skills, including education and help with preventing and treating skin ulceration, which is common in the rheumatic diseases.

There is a strong tradition in Britain to provide support for unemployed people, including assessment and placement. This applies to disabled people as well as able-bodied ones. Disablement resettlement officers are the important link and are found in every major town and city. They are responsible for a wide range of services provided by the government to help people with work-related problems because of ill health or disability. Another strong tradition is the wide range of self-help and charitable groups working in Britain. For rheumatic patients, they range from Arthritis Care and the National Ankylosing Spondylitis Society, which are mainly concerned with patient welfare, to the Arthritis and Rheumatism Council, whose main job is to fund research and education into all aspects of these crippling diseases.

Rheumatic patients in Britain are better off than many of their disabled peers, most notably those with neurologic disease. Rheumatologists in Britain understand and practice rehabilitation as part of total patient care. They have built excellent teams to assist them. The need now is to extend that practice to all rheumatic sufferers and more widely to all disabled and handicapped people by establishing a proper specialty of rehabilitation medicine in Britain.

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